

ABSTRACT

An electrochemical immunosensor system with reduced interference, comprising: a first immunosensor that generates an electrochemical signal based on the formation of a sandwich between an immobilized antibody, a target analyte and a labeled antibody, wherein a portion of the signal arises from non-specific binding of the labeled antibody in the region of the first immunosensor, and a second immunosensor that acts as an immuno-reference sensor and generates a signal that is the same as or predictably related to the degree of non-specific binding which occurs in the region of the first immunosensor, and has an immunocomplex between an immobilized antibody and an endogenous or exogenous protein that is in the sample and that is not the target analyte.